



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/407,569	09/28/1999	BARRY SHEPARD	10836.39US01	2929

22854 7590 02/04/2005

MOORE, HANSEN & SUMNER, PLLP
225 SOUTH SIXTH ST
MINNEAPOLIS, MN 55402

EXAMINER

ROBINSON BOYCE, AKIBA K

ART UNIT	PAPER NUMBER
----------	--------------

3623

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/407,569

Applicant(s)

SHEPARD ET AL.

Examiner

Akiba K Robinson-Boyce

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 107-117, 119, 121, 123-136, 138, 140, 142-154, 156, 158 and 160-167 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 107-117, 119, 121, 123-136, 138, 140, 142-154, 156, 158, 160-167 is/are rejected.
- 7) ☒ Claim(s) 120, 122, 139, 141, 157 and 159 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/8/04 has been entered.

Status of Claims

2. In response to the communication received on 11/8/04, the following is a non-final office action. Claims 1-106 have been cancelled. Claims 107, 108, 115, 117, 119, 120-123, 125, 127, 134, 136, 138-142, 144, 145, 152, 154 and 156-160 have been amended. Claims 162-167 have been added. Claims 107-117, 119-136, 138-154 and 156-167 remain pending in this application and have been examined on the merits. Claims 107-117, 119-136, 138-154 and 156-167 are rejected. The previous rejection has been withdrawn and the following reflects the claims as amended.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3623

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 107-110, 112, 115, 116, 117, 119, 121, 123-129, 131, 134, 135, 136, 138, 140, 142-147, 149, 152-154, 156, 158, 160-167, are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaltman (US 5,436,830), and further in view of Frost (US 5,041,972).

As per claim 107, 125, 144, Zaltman discloses:

Presenting/present a sensory stimulus representation through a computer system to a plurality of respondents..., the sensory stimulus representation embodying one or more sensory cues that influence human behavior/present a sensory stimulus representation through a computer system, (Col. 3, lines 16-20, [sensory stimuli used to understand customer thinking, where the pictures represent the cues]).

Inputting by/receive as input from the respondents into the computer system classification information representing an actual respondent perception elicited in the respondents in response to the one or more sensory cues presented to the respondents.../receive as input from the customers classification information, (col. 2, lines 10-13, [sensory input elicited], w/ col. 4, lines 31-36, [using keyboard input to designate groups]).

Aggregating/aggregate the classification information input by the respondents to derive aggregated classification information representative of respondent perceptions/aggregate the classification information input by the customers, (Col. 9, lines 50-54, [aggregating into a consensus map]);

Correlating/correlate the aggregated classification information with the one or more sensory cues using the computer system/correlate the aggregated classification information, (col. 12, lines 14-16, [eliciting and storing baseline image that correlates closest with research topic]);

wherein the computer system infers, as a function of a correlation of the aggregated classification information and the one or more sensory cues, a relationship between the sensory stimulus representations and the actual respondent perceptions that is potentially not discernable to a human researcher, (col. 12, lines 23-25, [generating a graphical representation of relationships among stored images which represent the sensory stimulus representations and constructs, where constructs are elicitations from consumers and represent the actual respondent perceptions]).

Zaltman does not disclose respondents having a statistically significant sample size, but does disclose a set of customers that have information elicited from them in order to construct marketing campaigns in the abstract, lines 1-2.

However, Frost discloses:

respondents having a statistically significant sample size, (Col. 2 lines 54-60, sample of consumers interviewed that is statistically represented). Frost discloses this limitation in an analogous art for the purpose of showing that market researchers choose sets of consumers to provide samples.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for respondents to have a statistically significant sample size with

the motivation of showing that consumer perceptions can be derived from select consumers.

Zaltman does not disclose the classification information locating the sensory stimulus representation relative to at least one dimensional axis representing a range between a desired respondent perception and a differentiated respondent perception conceptually related to the desired respondent perception, but does disclose the generation of a graphical representation of relationships among images and constructs col. 12, lines 23-24, where similarities and differences in the images are explored as the user sorts and selects images into groups in Col. 10, lines 37-52.

However, Frost discloses:

The classification information locating the sensory stimulus representation relative to at least one dimensional axis representing a range between a desired respondent perception and a differentiated respondent perception conceptually related to the desired respondent perception, (col. 11 lines 15-33, shows resulting change in an evaluation is reflected by the resultant relocation of the point of preference, and shows that the relocation points are measured by the Euclidean distances of those points from the reference points). Frost discloses this limitation in an analogous art for the purpose of determining to what extent that each attribute describes a given fragrance used in related consumer products, where the attribute information in Frost represents the classification information.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for the classification information to locate the sensory stimulus

Art Unit: 3623

representation relative to at least one dimensional axis representing a range between a desired respondent perception and a differentiated respondent perception conceptually related to the desired respondent perception with the motivation of determining the difference a respondent's perception has in relation to a desired response.

As per claims 108, 127, 145, Zaltman discloses:

Further comprising identifying at least one cue/sensory cue perceived by the respondents in response to the presented sensory stimulus representation, the identified at least one sensory cue relating to one or more elements of the presented sensory stimulus representation/wherein the computer system is further configured to identify at least one sensory cue perceived by the customers in response to the presented sensory stimulus representation, the identified at least one cue relating to one or more elements of the presented sensory stimulus representation, (Col. 4, lines 21-27, [paralanguage that consist of cues or factors]).

As per claims 109, 126, 146, Zaltman discloses:

Further comprising receiving in the computer system, a database comprising a plurality of particular sensory stimulus representations that are configurable by the user/further comprising a data storage system including one or more data storage devices coupled thereto, wherein the data storage system comprises a database coupled to the computer system and configured to store a plurality of sensory stimulus representations, (Col. 4, lines 38-44, [file or bank of sensory images stored that represent sounds, colors, etc., where customer is able to add descriptions to the file]).

As per claims 110, 128, 129, 147, Zaltman discloses:

Wherein the database is created by the user/wherein the computer system is further configured to receive a database comprising a plurality of sensory stimulus representations that are configurable by a user, (Col. 4, lines 43-44, [customer adding description to file]).

As per claims 112, 131, 149, Zaltman discloses:

Wherein the/each sensory stimulus representation in the database is associated with an agent that identifies relationships between two or more sensory stimulus representations stored in the database, (Col. 8, lines 52-60, [where constructs are graphically linked based on relationships established by the customer]).

As per claims 115, 134, 152, Zaltman discloses:

Further comprising receiving, in the computer system, responses from the respondents related to one or more of the sensory stimulus representations/further configured to receive responses from the customers related to one or more of the sensory stimulus representations, (Col. 8, lines 14-26, [response to the particular customer]).

As per claims 116, 135, 153, Zaltman discloses:

Wherein at least one response comprises a description of at least one of the sensory stimulus representations in relation to a desired perception, (Col. 8, lines 27-44, [customer describing how he/she thinks and illustrating thoughts with images]).

As per claim 117, 136, 154, Zaltman discloses:

a description of an emotion of a respondent in response to a sensory stimulus representation, (col. 3, lines 32-38, sensory metaphors);

Art Unit: 3623

Zaltman fails to disclose a rationale for ranking a set of one or more sensory stimulus representations against a specific desired perception and an opposite perception, but does disclose sensory stimulus in Col. 3, lines 16-20, and Col. 4, lines 61-66 and opposite representations in Col. 4, line 67-Col. 5, line 2.

However Frost discloses:

A rationale for ranking a set of one or more sensory stimulus representations against a specific desired perception and an opposite perception, (Col. 8, lines 50-53, [where rationale is represented by the expressed degree of preference]). Frost discloses this limitation in an analogous art for the purpose of showing the reason why a user may have ranked the sensory stimulus in a certain order.

It would have been obvious to one of ordinary skill in the art to have a rationale for ranking a set of one or more outputted particular visual representations against a specific desired perception and any one of its opposite/ with the motivation of determining the reason why certain visual representations were chosen in a particular order.

As per claims 119, 138, 156, Zaltman discloses:

Presenting/present an initial desired perception and different sensory stimulus representations to be chosen by one or more respondents as representatives that reinforce the initial desired perception, (col. 7, lines 14-25 and lines 54-62, shows initial images are stored and selected for evaluation, also shows elicitation of additional constructs and sensory images).

Zaltman fails to disclose processing the classification information, but does disclose classifying in col. 2, lines 10-13, [sensory input elicited], w/ col. 4, lines 31-36, [using keyboard input to designate groups]).

However Frost discloses:

processing the classification information, (Col. 8, lines 55-67, each item "A" through "F" are measured and processed by a squeeze analysis). Frost discloses this limitation in an analogous art for the purpose of showing the likelihood of purchasing and item.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to process the classification information in order to make use of the classification information.

Zaltman fails to disclose Collecting/collect respondent observations and rationale for ranking of the chosen sensory stimulus representations, but does disclose eliciting a customer for constructing advertising/marketing campaigns in the abstract, lines 1-2.

However Frost discloses:

Collecting/collect respondent observations and rationale for ranking of the chosen sensory stimulus representations, (Col. 8, lines 45-53, [where the rationale is represented by the degree of preference]). Frost discloses this limitation in an analogous art for the purpose of showing the reason why a customer may have ranked a representation.

It would have been obvious to one of ordinary skill in the art to collect respondent observations and rationale for ranking the chosen visual representations with the motivation of determining the meaning of why certain representations were chosen.

As per claims 121, 140, 158, Zaltman discloses:

Creating/create a set of sensory stimulus/ create a set of related sensory stimulus representations that leverage the at least one cue perceived by the respondents in response to the presented sensory stimulus representation, (Col. 4, lines 38-45, [sensory images that are represented by an *array* of sounds, colors, shapes and descriptions of smells, touches, etc.]);

Presenting/present a perceptual map using the output device, (Col. 12, lines 26-31, [deriving and visually presenting a consensus map]).

Receiving/receive input from the respondents regarding correlation of the set of sensory stimulus representations with the perceptual map, (Col. 12, lines 14-16, [eliciting and storing of a baseline image from the consumer that correlates closest with the topic]).

As per claim 123, 142, 160, Zaltman discloses:

Further comprising receiving the/wherein the computer system is further configured to receive the classification information from at least one respondent using a computer terminal in communication with the computer system via a network, (Col. 6, line 54-col. 7, line 7, central processing unit w/ keyboard)).

As per claims 124, 143, 161, Zaltman discloses:

Wherein the sensory stimulus representation comprises a visual element, (Abstract, lines 7-9, [files or images that pictorially represent important sensory aspects]).

As per claims 162, 164, 166, Zaltman discloses:

Wherein each sensory stimulus representation in the database is associated with an agent that identifies relationships between the sensory stimulus representation and a respondent perception, (col. 13, lines 11-13, central processor that generates a graphical representation of relationships).

As per claim 163, 165, 167, Zaltman discloses:

Wherein receiving input from the respondents regarding correlation of the set of sensory stimulus representations with the perceptual map comprises receiving input from the respondents using a graphical user interface/ Wherein each sensory stimulus representation in the database is further configured to receive the input from the respondents using a graphical user interface, (Col. 12, lines 65-66, input device to manipulate image data).

5. Claims 111, 113, 114, 130, 132, 133, 148, 150, 151, are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaltman (US 5,436,830) as applied to claim 1 above, and further in view of Frost, (5,041,972), and Bell (US 5,424,945).

As per claims 111, 130, 148, neither Zaltman nor Frost disclose wherein the database is created by a third party/further comprising receiving a response from a third

Art Unit: 3623

party related to one or more of the sensory stimulus representations, but Zaltman does disclose receiving a response from a customer in col. 4, lines 31-36.

However, Bell discloses:

Further comprising wherein the database is created by a third party/receiving a response from a third party related to one or more of the sensory stimulus representations, (col. 15, lines 36-42, [graphic designer overriding the system]). Bell discloses this limitation in an analogous art for the purpose of showing that inputs from a third party such as a graphic designer can also be used.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to receive a response from a third party with the motivation of using responses from other sources in order to give a wide variety of responses.

As per claims 113, 132, 150, neither Zaltman nor Frost disclose wherein the classification information comprises ratings further comprising determining an average rating for a sensory stimulus representation as a function of the ratings, but Zaltman does disclose sensory stimulus in Col. 3, lines 16-20.

However, Bell discloses:

Wherein the classification information comprises ratings further comprising determining an average rating for a sensory stimulus representation as a function of the ratings, (Col. 16, lines 29-46, [represented by collectively taking the series of objective descriptions of the appearance of a document into account to yield point scores, in this case the point scores represent the average rating]). Bell discloses this limitation in an analogous art for the purpose of showing that stimulus can be rated at different levels.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to comprise determining an average rating for a sensory stimulus representation as a function of the ratings with the motivation of determining an average value with respect to how the users of the system rate the sensory stimuli.

As per claim 114, 133, 151, neither Zaltman nor Frost disclose the classification information comprises ratings, and further comprise determining a ranking of one or more of the sensory stimulus representations as a function of the ratings, but Zaltman does disclose sensory stimulus in Col. 3, lines 16-20.

However, Bell discloses:

the classification information comprises ratings, (Col. 16, lines 29-46, [represented by point scores]); and

and further comprise determining a ranking of one or more of the sensory stimulus representations as a function of the rating, (Col. 8, lines 50-53, [ranking according to degree of preference]). Bell discloses these limitations in an analogous art for the purpose of showing that the ratings can be represented in a certain order.

It would have been obvious to one of ordinary skill in the art to processes the rating in order to identify a ranking of one or more of the outputted particular visual representations with the motivation of identifying the level of importance of particular reaction.

Allowable Subject Matter

6. Claims 120, 122, 139, 141, 157 and 159 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 107-110, 112, 115, 116, 121-129, 131, 134, 135, 140-147, 149, 152, 153, and 158-161 have been considered, but due to the applicant's amendment, are moot in view of the new ground(s) of rejection.

8. Applicant's arguments with respect to claims 111, 113, 114, 130, 132-133, 148, 150 and 151 have been considered, but due to the applicant's amendment, are moot in view of the new ground(s) of rejection.

As per the above mentioned claims, the combination of Zaltman and Frost was introduced. Frost was combined with Zaltman to show the following limitation "the classification information locating the sensory stimulus representation relative to at least one dimensional axis representing a range between a desired respondent perception and a differentiated respondent perception conceptually related to the desired respondent perception". Frost shows this limitation in col. 11 lines 15-33. Here, Frost shows resulting change in an evaluation is reflected by the resultant relocation of the point of preference or evaluation, and shows that the relocation points are measured by the Euclidean distances of those points from the reference points. Frost discloses this

Art Unit: 3623

limitation in an analogous art for the purpose of determining to what extent that each attribute describes a given fragrance used in related consumer products, where the attribute information in Frost represents the classification information. In this case, the attribute information (which represents classification information) is used in conjunction with the evaluation, and hence, is also used in conjunction with relocating. The point of preference or evaluation.

Art Unit: 3623

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 703-305-1340. The examiner can normally be reached on Monday-Tuesday 8:30am-5pm, and Wednesday, 8:30 am-12:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7238 [After final communications, labeled "Box AF"], 703-746-7239 [Official Communications], and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

ARB

A. R. B.
February 2, 2005

Susanna M. Diaz
SUSANNA M. DIAZ
PRIMARY EXAMINER
AU 3623